

### REMARKS

The Applicants sincerely appreciate the thorough examination of the present application as evidenced by the Final Office Action of April 16, 2008 (the Final Action). In the following remarks, the Applicants will show that all claims are patentable over the cited art. Accordingly, a Notice of Allowance is respectfully requested in due course.

#### **Independent Claims 16 And 24 Are Patentable**

Claims 16 and 24 have been rejected under 35 U.S.C. Sec. 103(a) as being unpatentable over U.S. Patent Publication No. 2003/0169287 to Liu ("Liu") in view of U.S. Patent Publication No. 2002/0188948 to Florence ("Florence").

The Applicant respectfully submits, however, that Claims 16 and 24 are patentable over the combination of Liu and Florence for at least the reasons discussed below. Claim 24, for example, recites a handheld electronic device comprising:

- a local display mounted on a housing of the device;
- a processor coupled to the display wherein the processor is configured to generate information within the handheld electronic device wherein the information is adapted for display on the local display of the handheld electronic device; and
- a transceiver coupled to the processor wherein the transceiver is configured to transmit the generated information from the handheld electronic device over a wireless coupling to a remote receiver for display on a video screen remote from the handheld electronic device;

wherein the processor is further configured to determine whether the remote receiver of the video screen is within a transmission range of the handheld electronic device, to automatically initiate transmitting the generated information from the transceiver over the wireless coupling to a receiver for display on the remote video screen responsive to a determination that a receiver of a video screen is within transmission range without user input at the handheld electronic device, and to display the information on the local display responsive to a determination that a receiver of a video screen is not within transmission range. (Underline added.)

The Final Action concedes that Liu fails to teach:

- determining at the handheld electronic device that the receiver is within a transmission range of the handheld electronic device;
- responsive to a determination that the receiver is within range automatically transmitting the generated information; and

displaying the information on the display of the handheld electronic device responsive to a determination that no receiver is within range of the handheld electronic device.

Final Action, pages 10-11.

In support of the rejection of Claims 16 and 24, the Office Action states that Florence teaches:

the use of Bluetooth wireless protocol to transfer data between a handheld device and a receiver (1305-figure 13, Para 66). It is well known in the art that before any data transfer using Bluetooth wireless protocol a determination has to be made as to whether or not the devices are within range (see applicant's admitted prior art "Bluetooth technology" document by Erasala and Yen).

Therefore, it would have been obvious to one of ordinary skill in the art to modify Liu's method to include the use of Bluetooth wireless protocol, as taught by Florence. The motivation would have been to provide a suitable wireless communication link.

Final Action, page 11.

Accepting for the sake of argument that a determination has to be made as to whether or not devices are within range when using Bluetooth, the Applicant respectfully submits that Liu, Florence, and/or Erasala/Yen (Erasala *et al.*, "Bluetooth Technology: A Strategic Analysis Of Its Role In Global 3G Wireless Communication Era," Computer Standards & Interfaces, 24 (2002) 193-206) fail to teach or suggest automatically initiating transmitting generated information for display on the remote video screen without user input at the handheld electronic device. In particular, the Erasala/Yen reference discusses automatically forming a network as opposed to automatically initiating transmitting generated information for display. More particularly, Erasala/Yen states that:

When Bluetooth-capable devices come within range of one another, an electronic conversation determines whether they have data to share or whether one needs to control the other. The electronic conversation occurs automatically and there is no need for the users to press a button or give a command. Once the conversation has initiated, the devices, whether part of a computer network system or a stereo, form a network.

Erasala/Yen, page 194, Section 2.1. Erasala/Yen, however, fails to provide the missing teaching of what, if anything, is done with the established network, much less the missing teaching of automatically initiating transmitting the generated information for display on the

remote video screen responsive to a determination that a receiver of a video screen is within transmission range without user input.

In the Response to Arguments Section of the Final Action, the Final Action states that:

In response to applicant's argument (page 12 paragraph 5 and page 14 paragraph 5) that the Bluetooth protocol teaches automatically forming a network as opposed to automatically initiating transmitting generated information for display, the examiner respectfully disagrees since it is well known in the art the use of Bluetooth protocol between devices within range to establish a connection and to transfer data, in this case the data will be the video signal (see Erasala/Yen reference submitted by applicant, section 2.2, 2<sup>nd</sup> paragraph).

Final Action, page 2. The Applicant respectfully maintains that while Erasala/Yen discusses automatically establishing a connection between Bluetooth devices, the art fails to teach or suggest automatically initiating transmitting generated information for display on a remote video screen responsive to determining that a receiver of the remote video screen is within transmission range without user input. In particular, the cited portion of Erasala states that:

Piconets start with two connected devices, such as a portable computer and a cellular telephone, and may grow to include as many as eight devices. Users do have the option of setting up their Bluetooth devices to automatically establish a connection with another Bluetooth device when within range. Bluetooth also permits setting up automatic data synchronization between devices. (Underline added.)

Erasala, section 2.2, paragraph 2, page 195. Accordingly, automatically establishing a connection and/or setting up automatic data synchronization as discussed in Erasala fails to provide the missing teaching of automatically initiating transmitting generated information for display on a remote video screen responsive to determining that a receiver of the remote video screen is within range without user input.

Accordingly, the cited art fails to teach or suggest the recitations of Claim 24, and Claim 24 is thus patentable. Claim 16 is also patentable for reasons similar to those discussed above with respect to Claim 24. In addition, dependent Claims 17, 19-23, 25-29, and 43-48 are patentable at least as per the patentability of Claims 16 and 24 from which they depend.

**Claims 1 And 11 Are Patentable**

Claim 1 has been rejected under 35 U.S.C. Sec. 103(a) as being unpatentable over U.S. Patent Publication No. 2003/0169287 to Liu ("Liu") in view of U.S. Patent Publication No. 2002/0188948 to Florence ("Florence") in view of U.S. Patent No. 4,837,623 to Motoyama (Motoyama). Claim 11 has been rejected under 35 U.S.C. Sec. 103(a) as being unpatentable over Liu in view of Motoyama. The Applicant respectfully submits, however, that Claims 1 and 11 are patentable over the cited art for at least the reasons discussed below. Claim 1, for example, recites:

A method of displaying information from a handheld electronic device on a video screen remote from the handheld electronic device, the method comprising:  
receiving information from the handheld electronic device over a wireless coupling;  
responsive to receiving the information from the handheld electronic device, generating a video signal corresponding to the information from the handheld electronic device; and  
providing the generated video signal to the video screen for display of the information on the video screen;  
wherein receiving information from the handheld electronic device is preceded by determining if information is being transmitted from the handheld electronic device;  
wherein the operations of receiving the information from the handheld electronic device, generating the video signal, and providing the video signal to the video screen are performed automatically responsive to determining that information is being received from the handheld electronic device; and  
wherein the method further comprises automatically providing an alternate video signal to the video screen responsive to determining that information is not being received from the handheld electronic device.

The Office Action concedes that Liu fails to teach:

wherein receiving the information from the handheld electronic device is preceded by determining if information is being received from the handheld electronic device;  
wherein the operations of receiving the information from the handheld electronic device, generating the video signal, and providing the video signal to the video screen are performed automatically responsive to determining that information is being transmitted from the handheld electronic device; and  
wherein the method further comprises automatically providing an alternative video to the video screen responsive to determining that information is not being transmitted from the handheld electronic device.

Final Action, page 4. In support of the rejection of Claim 1, the Office Action states that Florence teaches:

the use of Bluetooth wireless protocol to transfer data between a handheld device and a receiver (1305-figure 13, Para 66). It is well known in the art that before any data transfer using Bluetooth wireless protocol a determination has to be made as to who is trying to send the data in order to accept the data (see applicant's admitted prior art "Bluetooth technology" document by Erasala and Yen).

Final Action, page 4. As discussed above with respect to Claims 16 and 24, however, the Erasala/Yen reference discusses automatically forming a network as opposed to automatically initiating transmitting generated information for display. Automatic network formation of the Erasala/Yen reference similarly fails to teach or suggest automatically generating and providing a video signal to a video screen responsive to determining that information is being received from the handheld electronic device. Accordingly, Liu, Florence, and Erasala (taken alone or in combination) fail to provide the teachings asserted by the Final Action to support the rejection of Claim 1.

Moreover, Motoyama fails to provide the teachings that are missing from Liu, Florence, and Erasala. Like Liu, Florence, and Erasala discussed above, Motoyama also fails to teach or suggest automatically generating and providing a video signal to a video screen responsive to determining that information is being received from a handheld electronic device. The Final Action has only cited Motoyama as teaching "automatically providing an alternate video" (*see*, Final Action, page 5). Moreover, Motoyama discusses an RF input of a television on which a cable signal or an antenna signal is applied and a VCR video input. None of the cited references, however, taken alone or in combination, teaches or suggests automatically generating and providing a video signal to a video screen responsive to determining that information is being received from a handheld electronic device.

Accordingly, the cited art fails to teach or suggest the recitations of Claim 1, and Claim 1 is thus patentable. Claim 11 is also patentable for reasons similar to those discussed above with respect to Claim 1. In addition, dependent Claims 2-6, 8-10, 12-14, and 37-38, and 40-42 are patentable at least as per the patentability of Claims 1 and 11 from which they depend.

**Dependent Claim 38 Is Separately Patentable**

Dependent Claim 38 has been rejected under 35 U.S.C. Sec. 103(a) as being unpatentable over Liu in view of Florence in view of Motoyama as applied to Claim 1, and further in view of U.S. Patent No. 6,504,480 to Magnuson *et al.* ("Magnuson"). Claim 38 is patentable for at least the reasons discussed above with respect to Claim 1. Dependent Claim 38 is also separately patentable.

Dependent Claim 38 depends from Claim 1, and Claim 38 thus includes all recitations discussed above with respect to Claim 1. In addition, Claim 38 recites: "generating a beacon allowing the handheld electronic device to determine if it is within range to transmit information over the wireless coupling for the video screen." The Final Action concedes that: "Liu, Florence, and Motoyama fail to teach generating a beacon allowing the handheld electronic device to determine if it is within range." Final Action, page 15. In support of the rejection of Claim 38, the Final Action states that: "In an analogous art, Magnuson teaches the use of beacons to determine if a device is within range (Col. 4, lines 55-65)." Final Action, page 15.

The Applicants respectfully submit, however that Magnuson fails to teach or suggest a beacon as recited in Claim 38. In particular, the cited portion of Magnuson states that:

In other versions of the described alternative embodiment, master 10 may be configured as a beacon with continuous transmission of the appropriate access code. In such an embodiment, slave phone 11, proxy pager 21, and/or slave PDA 22 are passive devices. Upon activation, the slave devices listen for the access code beacon from master 10. If the code is not received because the device is either outside the range of master 10, or master 10 is not activated, the slave devices would preferably not operate or allow full access to functionality.

Magnuson, col. 4, lines 55-65. Magnuson thus discusses disabling an electronic device (i.e., a slave device) when it does not receive a beacon from a master device. Nothing in Magnuson, however, teaches or suggests a beacon that allows a determination if a device is within range to transmit information for a video screen. Moreover, there is no motivation to selectively combine a beacon from the security system of Magnuson with wireless audio-visual

transmission as discussed in Liu, with a set top box as discussed in Florence, and/or with a television receiver as discussed in Motoyama.

In the Response to Arguments Section of the Final Office Action, the Final Action states that:

applicant should note that the use of beacons is to determine if a device is within range, also Magnuson teaches that if not code (beacon) is received it is because the device is out of range (Col. 4, lines 55-65).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. ... In this case Liu teaches two electronic devices trying to connect in order to transfer data and Magnuson teaches the use of beacons to check if the electronic devices are within range; therefore, the motivation will be to make sure the devices are within range in order to establish the connection.

Final Action, pages 2-3.

The Applicants respectfully submit that Magnuson discusses security systems providing proximate access signals to surrounding electronic devices (*see*, Magnuson, col. 1, lines 5-8) so that functionality of a slave device is activated when an access code beacon from a master device is received or not activated when the access code beacon from the master device is not received (*see*, Magnuson, col. 4, lines 56-65). In Magnuson, other than the access code beacon, there is no transmission/reception of signals between master and slave devices. Accordingly, there is no motivation in the cited art or in the knowledge generally available to use the beacon of Magnuson to allow a handheld electronic device to determine if it is within range to transmit information over a wireless coupling for a video screen. Moreover, there is no motivation to use the beacon of Magnuson in a method where information for a video screen is transmitted over a wireless coupling to a device generating the beacon.

Accordingly, the Applicant respectfully submits that Claim 38 is separately patentable over the cited art. The Applicant further submits that dependent Claims 41, 43, and 46 are separately patentable for reasons similar to those discussed above with respect to Claim 38.

Attorney Docket No. 9314-16  
Application Serial No. 10/655,422  
Filed: September 4, 2003  
Page 9

### CONCLUSION

Accordingly, the Applicants submit that all pending claims in the present application are in condition for allowance, and a Notice of Allowance is respectfully requested in due course. The Examiner is encouraged to contact the undersigned attorney by telephone should any additional issues need to be addressed.

Respectfully submitted,

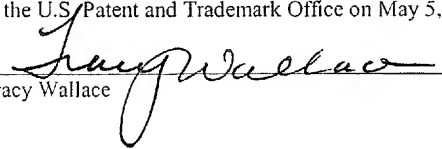


Scott C. Hatfield  
Registration No.: 38,176

**USPTO Customer No. 20792**  
Myers Bigel Sibley & Sajovec  
Post Office Box 37428  
Raleigh, North Carolina 27627  
Telephone: 919/854-1400  
Facsimile: 919/854-1401

#### CERTIFICATION OF TRANSMISSION

I hereby certify that this correspondence is being transmitted via the Office electronic filing system in accordance with § 1.6(a)(4) to the U.S. Patent and Trademark Office on May 5, 2008.



Tracy Wallace